

ABSTRACT OF THE DISCLOSURE

A low-cost, low-power, low-complexity, small, high-reliability, robust, seamless satellite communication network is described. The network performs encoding of a user signal at the customer premises to enable routing of the user signal to an appropriate destination beam at the satellite requiring low power user signal processing. Routing information is embedded at the periphery of the network CPE's rather than at the satellite. Embedding the routing information in this way greatly reduces on-board switching complexity and increases signal to interference ratio for the user.